

IN THE CLAIMS:

Please amend Claim 1 as follows.

1. (Currently Amended) A geometric model conversion method of converting a three-dimensional CAD geometric analytical model of a thin-walled structure into a two-dimensional analytical model, comprising:

a step of generating a plurality of tetrahedral solid elements each of which has a shape of a triangular pyramid having an apex and a base and a single-layered structure in a plate thickness direction, by dividing an input three-dimensional CAD geometric analytical model which has a thin-walled structure such that the base of the triangular pyramid is placed on one surface of the thin-walled structure and the apex of the triangular pyramid is placed on another surface of the thin walled structure opposing to the one surface, a surface and an opposing point of the tetrahedral solid element being in contact with two opposite surfaces of the thin-walled structure, or two sides of the tetrahedral solid element being in contact with two opposite surfaces of the thin-walled structure,

a step of generating intermediate nodes of sides that extend in a direction of plate thickness in each tetrahedral solid element having the shape of the triangular pyramid,

a step of connecting the intermediate nodes to generate a plurality of triangular shell elements ~~or rectangular shell elements~~ as the two-dimensional analytical model, and

a step of executing an injection molding analysis with respect to each shell element of the two-dimensional analytical model generated in said connecting step and outputting results of the injection molding analysis.

2. to 4. (Cancelled).